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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,246	12/03/2003	Nigel V. Spurr	H0005898	5403

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EXAMINER

LUGO, CARLOS

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

MC

Office Action Summary

Application No.

10/727,246

Applicant(s)

SPURR ET AL.

Examiner

Carlos Lugo

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to applicant's amendment filed on June 25, 2005.

Information Disclosure Statement

2. The information disclosure statement filed on April 21, 2005 was partially considered. Reference number US 5,304,926 was already considered in the last IDS presented by the applicant on December 3, 2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. **Claim 21 is rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claim recites the limitation "that via the data collected a calibration of the latch assembly will be performed. However, the current specification does not provide a clear explanation of how that calibration is performed by the collected data and what parts of the latch assembly are calibrated.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,3-7,10,11,13-17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,765,884 to Armbruster.

Regarding claims 1 and 11, Armbruster discloses a latch assembly control system comprising a latch assembly (Figure 1) with a motor (53) having at least one gear (26) for actuating a plurality of components of the latch assembly.

The latch assembly is associated with a gear tooth sensor (37) that senses a position of at least one gear to thereby provide a reference point registration and calibration via the collected data (Col. 5 Line 27 to Col. 6 Line 5).

Armbruster discloses that the gear will complete less than one revolution to obtain the data (a small angular displacement, Col. 5 Line 35).

As to claims 3 and 13, Armbruster discloses that the latch assembly is a vehicle door latch assembly.

As to claims 4 and 14, Armbruster discloses that the gear tooth sensor is integrated with the latch assembly (Figure 1).

As to claims 5,15 and 21, Armbruster discloses that the system further includes a vehicle management module (35).

As to claims 6 and 16, Armbruster discloses that the sensor will communicate data recollected from the gear.

As to claims 7 and 17, Armbruster discloses that the calibration is made by the vehicle management module (Col. 5 Line 58 to Col. 6 Line 5).

As to claims 10 and 20, Armbruster discloses that at least one component of the door latch assembly is actuated by the vehicle management module based on data collected from the at least one gear tooth sensor.

7. **Claims 2 and 12 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,765,884 to Armbruster as applied to claims 1 and 11 above, and further in view of US Pat No 5,304,926 to Wu.

Armbruster fails to disclose that the gear tooth sensor comprises at least one magnet located proximate to the gear. Armbruster discloses that the sensor used is a Hall-effect sensor (Claim 1).

Wu teaches that it is well known in the art to have a Hall sensor wherein the sensor has a magnet located proximate a gear in order to collect data (Figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a sensor with a magnet, as taught by Wu, into a device as described by Armbruster, in order to collect data directly from the gear.

8. **Claims 8,9,18 and 19 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,765,884 to Armbruster.

Armbruster fails to disclose a plurality of gear tooth sensors to collect data from the gear.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one sensor in a device as Armbruster disclose in order to obtain more accurate data.

Response to Arguments

9. Applicant's arguments filed on June 25, 2005 have been fully considered but they are not persuasive.

Regarding applicant's arguments that because Armbruster discloses a calibration example as prior art, the applicant does not requires to present or explain how the calibration is performed by the collected data and what parts of the latch assembly are calibrated (Page 5 Line 21), the argument is not persuasive and the applicant is require to amend the specification to provide the explanation of how the calibration is performed by the collected data and what parts of the latch assembly are calibrated.

As to applicant's arguments that element 37 is not a gear tooth sensor but it is a sensor used to sense a magnet connected to a motor shaft (Page 8 Line 4), the applicant's arguments are not persuasive. The applicant argues that the sensor presented by Armbruster does not detect the movement of the gear teeth. However, the claim language does not require that limitation. The current claim language requires a "gear tooth sensor" that senses the position of the gear; not the positions of the teeth.

The applicant is reminded that a label given to the claimed subject matter, i.e. "gear tooth sensor", does not distinguish the invention over the prior art.

As to applicant's arguments that it would not be obvious to incorporate the teachings of Wu, to have a Hall sensor wherein the sensor has a magnet located proximate a gear in order to collect data, into the device presented by Armbruster (Page 9 Line 19), the arguments presented by the applicant are not persuasive.

Both devices are used to sense the position of a gear. Wu teaches a similar embodiment that has a Hall sensor wherein the sensor has a magnet located proximate a gear in order to collect data directly from the gear.

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number 571-272-7058. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-272-7049.

Art Unit: 3676

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.L.

Carlos Lugo
AU 3676

August 30, 2005

A handwritten signature in black ink, appearing to read "Brian E. Glessner", followed by a long horizontal flourish line.

BRIAN E. GLESSNER
PRIMARY EXAMINER